

- ABSTRACT

METHOD AND APPARATUS FOR PROCESSING SIGNALS FOR RANGING
APPLICATIONS

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The present invention is related to a method and apparatus for processing a signal sent by a transmitter to a receiver, in particular for ranging applications. The
10 signal is typically sent by a satellite, and comprises a carrier signal, modulated by at least one pseudo random noise code and a navigation signal. The method of the invention comprises a step of estimating the multipath error at each calculation of the range. The estimation is
15 done by a multipath estimator module (23) on the basis of a predefined formula, said formula being a linear combination of said correlation values. Said formula is based on the calculation of at least four correlation values between at least four different versions of the PRN code and the PRN
20 encoded signal sent by the transmitter. All except two of the coefficients used in the linear combination may be set to zero.

(Figure 4)